



User's Guide

T-winder 30

Applicable for:

Spitfire 65/90 Extreme	Rockhopper 3 Extreme	ValueJet 1304	ValueJet 1324	ValueJet 1604
ValueJet 1604 W	ValueJet 1614	ValueJet 1624	ValueJet 1608 Hybrid	ValueJet 1628TD



This page is left blank intentionally

COPYRIGHT NOTICE

COPYRIGHT © October 11 Mutoh Belgium nv all rights reserved.

Mutoh reserves the right to modify the information contained in this manual at any time without prior notice.

This document may not be reproduced by any means, in whole or in part, without written permission of the copyright owner.

This document is furnished to support the Tensioning Winder 30 for Spitfire 65 Extreme, Rockhopper 3 Extreme, ValueJet 1304, ValueJet 1324, ValueJet 1604, ValueJet 1604 W, ValueJet 1608 Hybrid, ValueJet 1614, ValueJet 1624 and ValueJet 1628TD. In consideration of the furnishing of the information contained in this document, the party to whom it is given, assumes its custody and control and agrees to the following:

The information herein contained is given in confidence, and any part thereof shall not be copied or reproduced without written consent of Mutoh Belgium nv.

This document or the contents herein under no circumstances shall be used in the manufacture or reproduction of the article shown and the delivery of this document shall not constitute any right or license to do so.

October 11

Published: Mutoh Belgium nv, Archimedesstraat 13, B-8400 Oostende, BELGIUM

www.mutoh.eu

www.mutoh.be

IMPORTANT NOTICE

For users in Europe

This is a Class A product approved for industrial environments.

In a domestic environment this product may cause radio interference in which case you may be required to take adequate measures.

Change the direction of the receiving antenna or feeder.

Trademarks mentioned in this guide

- MUTOH, ValueJet, VJ-1604, VJ-1604 W, VJ-1304, VJ1314, VJ-1608 H, VJ-1614, VJ-1624, VJ-1628TD, Rockhopper 3 Extreme, Spitfire Extreme are registered trademarks or product names of Mutoh Belgium nv.
- Windows95, Windows98, Windows NT4.0, Windows2000, Windows XP, and MS-DOS are registered trademarks or product names of Microsoft Corporation.
- Other company and product names may be registered trademarks or product names.

⚠ Notes ⚠

- The product and the contents of this publication may be changed without prior notification.
- MUTOH Belgium nv has made the best efforts to keep this publication free from errors, but if you find any uncertainties or misprints, please call us or the reseller from which you bought this equipment.
- MUTOH Belgium nv shall not be liable for any damages or troubles resulting from the use of this equipment or this guide.



WEEE regulations

Environmental information
Disposal of your old product



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC

Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Table of contents

1	Safety instructions	7
2	Product overview.....	9
2.1	Part names and functions	9
2.1.1	Front side	9
2.1.2	Rear side	10
2.1.2.1	For a Spitfire 65" or Rockhopper 3 65"	10
2.1.2.2	For a ValueJet 1304 or ValueJet 1324 (*)	10
2.1.2.3	For a ValueJet 16XX series printer ()	11
2.2	In-the-box contents	12
2.2.1	For a Spitfire 65" or Rockhopper 3 65"	12
2.2.1.1	Winder kit	13
2.2.2	For a VJ - 1304 / VJ - 1324	14
2.2.2.1	T-Winder kit	14
2.2.3	For a VJ-1604 / VJ-1614 / VJ-1624 / VJ-1628TD series printer	15
3	Installation procedure	17
3.1	INstalling the front tensioning system	17
3.1.1	On a ValueJet 1304 / ValueJet 1324	17
3.1.2	On a VJ-1604 / VJ-1614, Spitfire and Rockhopper 3	21
3.1.3	On a VJ-1624 / VJ1628TD	24
3.2	Installing the rear scroller system (only for a Spitfire 65" or Rockhopper 3 65") ..	27
4	Calibration procedure	29
4.1	Tensioning bar	29
4.1.1	Calibration	29
4.1.2	Adjustment	31
4.2	Scroller bar	32
4.2.1	Calibration	32
4.2.2	Adjustment	34
5	Operating the system	35
5.1	Switching the power ON/OFF	35
5.2	Connecting the power cable	35
5.3	Activate the winding system	36
5.4	Locking the system	36
5.5	Loading roll media	37

This page is left blank intentionally

1 SAFETY INSTRUCTIONS

⚠ Important ⚠

- **BE SURE TO READ THE TERMS IN THE NEXT CHAPTER THOROUGHLY BEFORE INSTALLING AND OPERATING THE SYSTEM FOR YOUR OWN SAFETY.**

All safety related terms are bundled and categorized in three types.

Safety terms	Details
⚠ Important ⚠	Must be followed carefully to avoid death or serious bodily injury
⚠ Caution ⚠	Must be observed to avoid bodily injury (moderate or light) or damage to your equipment
⚠ Notes ⚠	Contains important information and useful tips on the operation of your printer

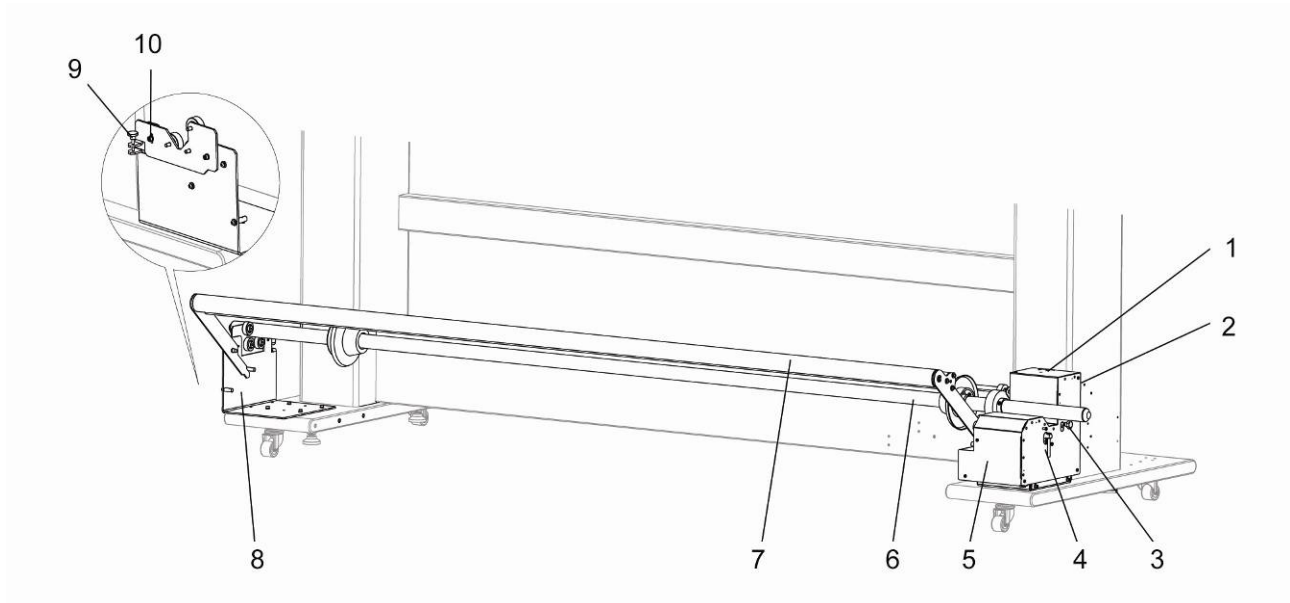
- Do not stand on or place heavy objects on the unit. Doing so may result in the unit tipping or falling over and causing injury.
- Do not attempt to plug in electrical plugs with wet hands. Doing so may result in electrical shock.
- Do not use thinner, benzene, alcohol or other active agents. Doing so may result in damage or paint peeling from the casing.
- Be careful not to spill water inside the winder. Doing so may result in a short circuit.
- Never open the covers fixed with screws. Doing so may result in electrical shock or a malfunctioning in the unit.
- When setting roll media, place it on top of a desk or other flat surface. Setting roll media with the scroller standing up may damage them.

This page is intentionally left blank

2 PRODUCT OVERVIEW

2.1 PART NAMES AND FUNCTIONS

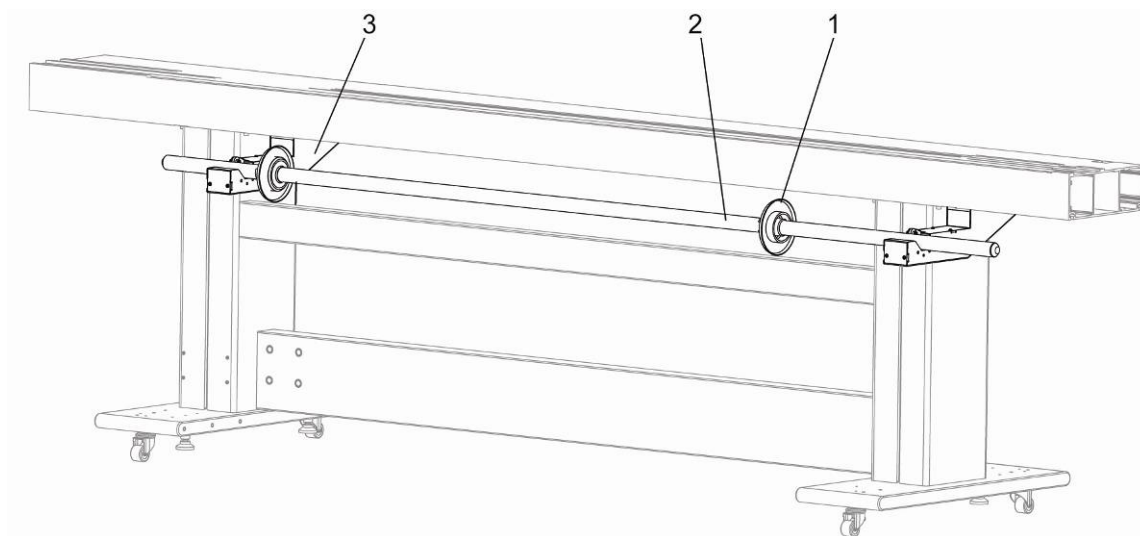
2.1.1 Front side



N°	Name	Function
1	Operation panel	Enable or disable the winding system
2	Power switch	To switch ON and OFF the T Winder 30
3	Horizontal adjustment screw	Adjust the side position of the scroller
4	Scroller lock lever	To lock and unlock the scroller
5	Driving mechanism	Winds up the printed media
6	Scroller assembly	To install an empty core on which printed media is wound up
7	Tensioning bar	Optimizes the tension between print platform and scroller
8	Left bracket	Scroller support
9	Scroller height adjustment screw	Lower or raise the scroller
10	Scroller height fixing screw	Fix the height of the scroller

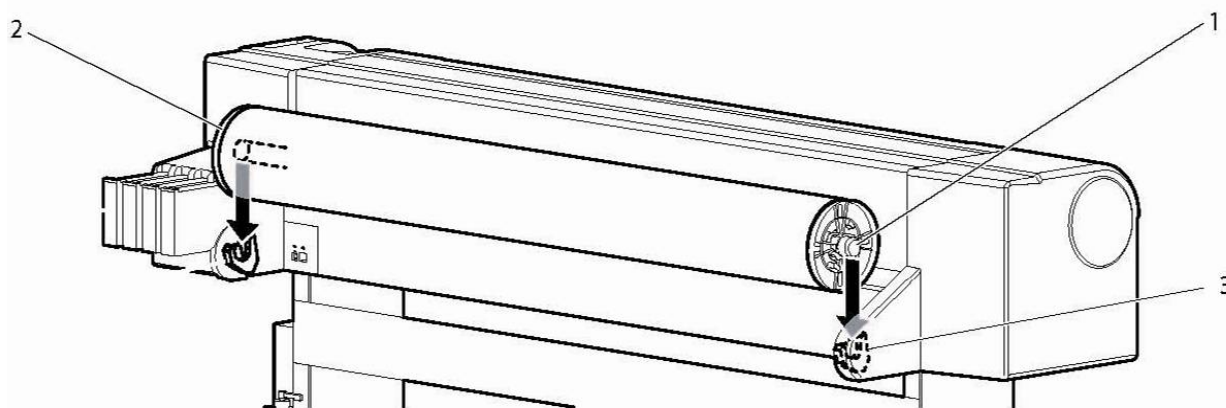
2.1.2 Rear side

2.1.2.1 For a Spitfire 65" or Rockhopper 3 65"



N°	Name	Function
1	Scroller bar	supports the movable flanges
2	Movable flange	2"-3" compatible core holders
3	Scroller bracket	supports the scroller bar

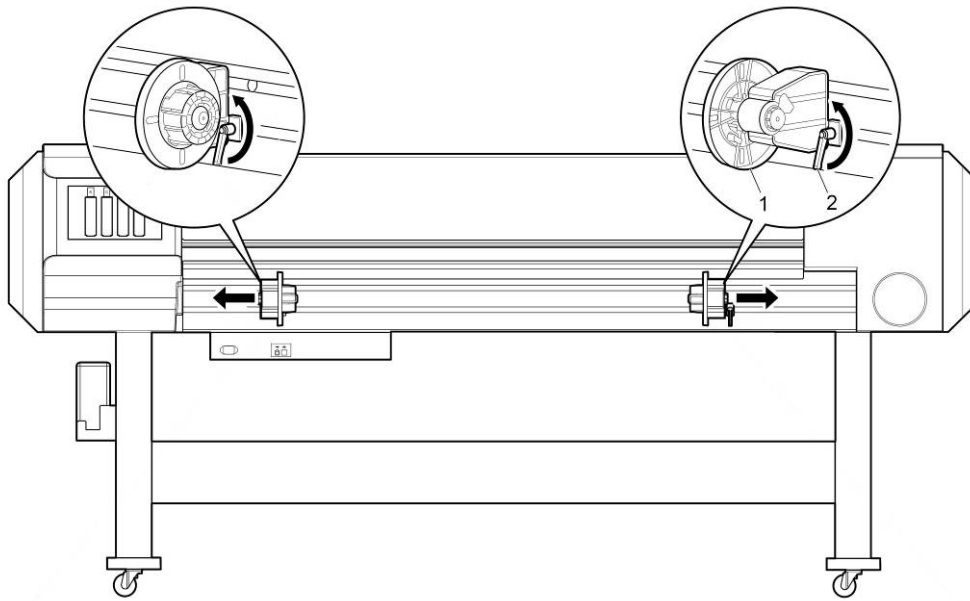
2.1.2.2 For a ValueJet 1304 or ValueJet 1324 (*)



N°	Name	Function
1	Scroller	supports the movable flanges
2	flange	There is one movable and one fixed flange to position the media correctly
3	Scroller receiver	Movable flange.

⁰ This system is pre mounted and not included in the kit. But works as one system with the tensioning winder.

2.1.2.3 For a ValueJet 16XX series printer (*)

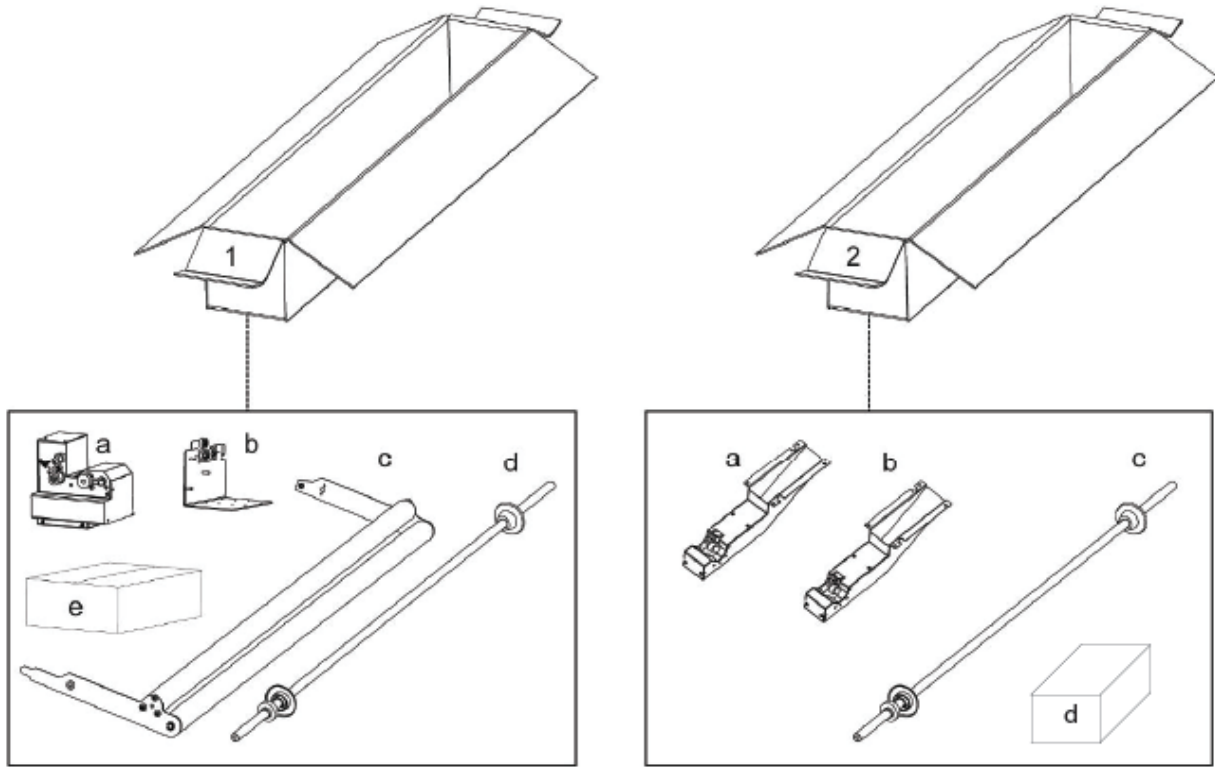


N°	Name	Function
1	Scroller support	Movable 2-3" compatible core holders.
2	Scroller support lever	To lock or unlock the scroller supports.

(*) This system is pre mounted and not included in the kit. But works as one system with the tensioning winder.

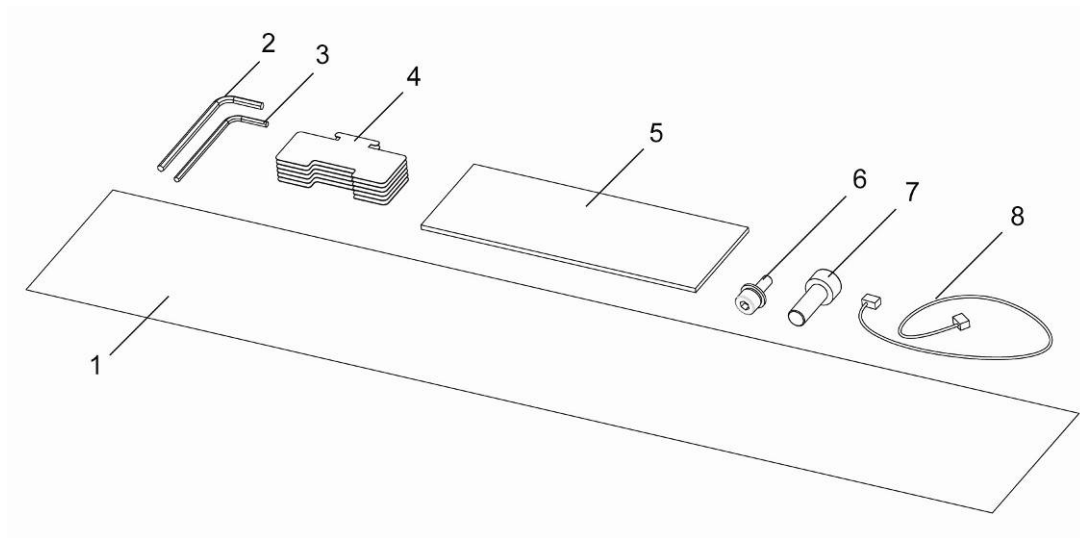
2.2 IN-THE-BOX CONTENTS

2.2.1 For a Spitfire 65" or Rockhopper 3 65"



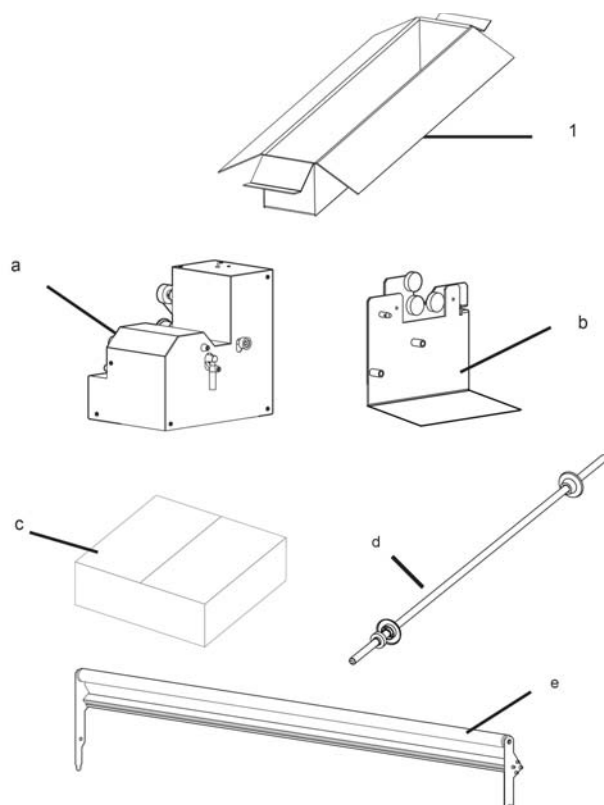
	N°	Part Description	Quantity
☐	1	Front tensioning system	1
☐	a	Driving mechanism and right bracket	1
☐	b	Left bracket	1
☐	c	Tensioning bar	1
☐	d	Scroller assembly (2-3" compatible) and core	1
☐	e	Winder Kit (*)	1
☐	2	Rear scroller system	1
☐	a	Left rear scroller bracket	1
☐	b	Right rear scroller bracket	1
☐	c	Scroller assembly (2-3" compatible)	1
☐	d	Screw kit	1
☐		Hexagon bolt M6	8
☐		Plain washer M6	8
☐		Spring washer M6	8

* Please refer to the next page for the contents of the winder kit

2.2.1.1 Winder kit

	N°	Part Description	Quantity
☐	1	PET adjusting strip	1
☐	2	Hexagon key 3 mm	1
☐	3	Hexagon key 4 mm	1
☐	4	Spacer	6
☐	5	Adjustment plate	1
☐	6	Screw M4x10	10
☐	7	Screw M5x12	2
☐	8	Power cable (EU, US and UK)	3

2.2.2 For a VJ - 1304 / VJ - 1324

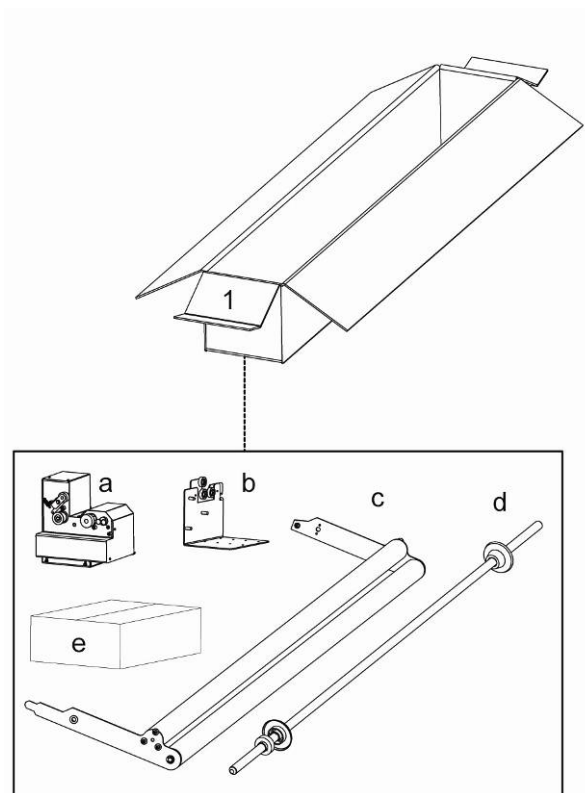


	N°	Part Description	Quantity
☐	1	T-Winder kit	1
	a	Driving mechanism and right bracket	1
	b	Left bracket	1
	c	T winder kit	1
	d	Scroller assembly (2-3" compatible) and core	1
	e	Tensioning bar	1

2.2.2.1 T-Winder kit

	N°	Part Description	Quantity
☐	1	PET adjusting strip	1
☐	2	Hexagon key 3 mm	1
☐	3	Hexagon key 4 mm	1
☐	4	Spacer	6
☐	5	Adjustment plate	1
☐	6	Screw M4x10	10
☐	7	Screw M5x12	3
☐	8	Motorbox support bracket	1
☐	9	Motorbox closing bracket	1
☐	10	Roller support closing bracket	1
☐	11	Power cable (EU, US and UK)	3

2.2.3 For a VJ-1604 / VJ-1614 / VJ-1624 / VJ-1628TD series printer



N°	Description	Quantity
1	T-Winder kit	1
a	Driving mechanism and right bracket	1
b	Left bracket	1
c	Tensioning bar	1
d	Scroller assembly	1
e	Winder kit	1

2.2.3.1 Winder kit

	N°	Part Description	Quantity
☐	1	PET adjusting strip	1
☐	2	Hexagon key 3 mm	1
☐	3	Hexagon key 4 mm	1
☐	4	Spacer	6
☐	5	Adjustment plate	1
☐	6	Screw M4x10	10
☐	7	Screw M5x12	2
☐	8	Power cable (EU, US and UK)	3

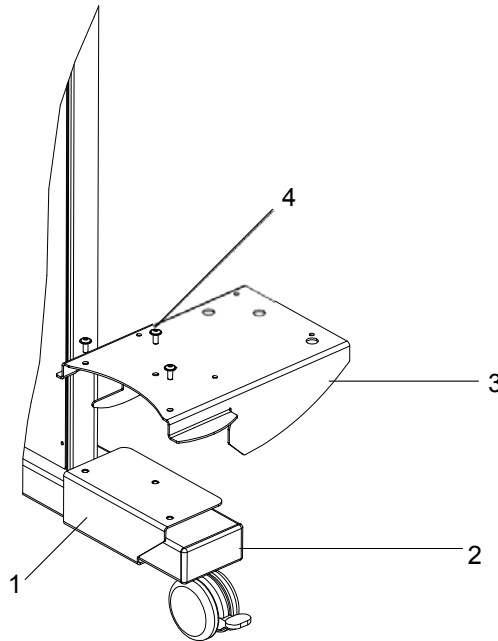
3 INSTALLATION PROCEDURE

3.1 INSTALLING THE FRONT TENSIONING SYSTEM

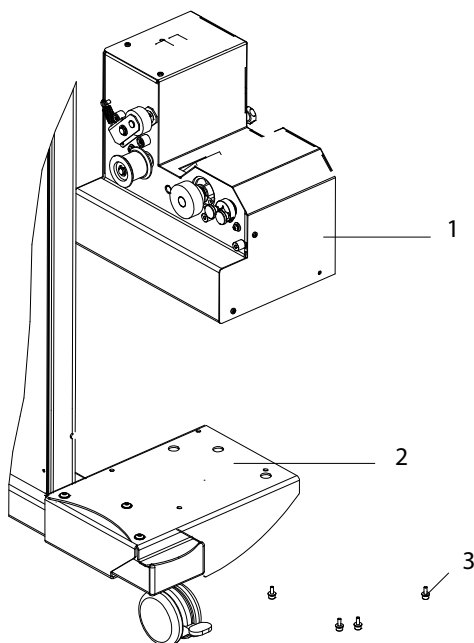
3.1.1 On a ValueJet 1304 / ValueJet 1324

The right bracket consists out of 2 parts.

- Step 1 :** Slide the closing bracket (1) over the stand (2). Make sure that the closing bracket is pushed properly against the stand.
- Step 2 :** If the closing bracket is positioned properly, slide the support bracket onto the closing bracket. Make sure that the support bracket its flange is properly positioned against the closing bracket and the stand.
- Step 3 :** When it is positioned correctly, fix the support bracket (3) onto the closing bracket using 3 "M5x12" (4) screws.



Step 4 : Install the driving mechanism (1) onto the support bracket (2) and tighten the four screws (3).

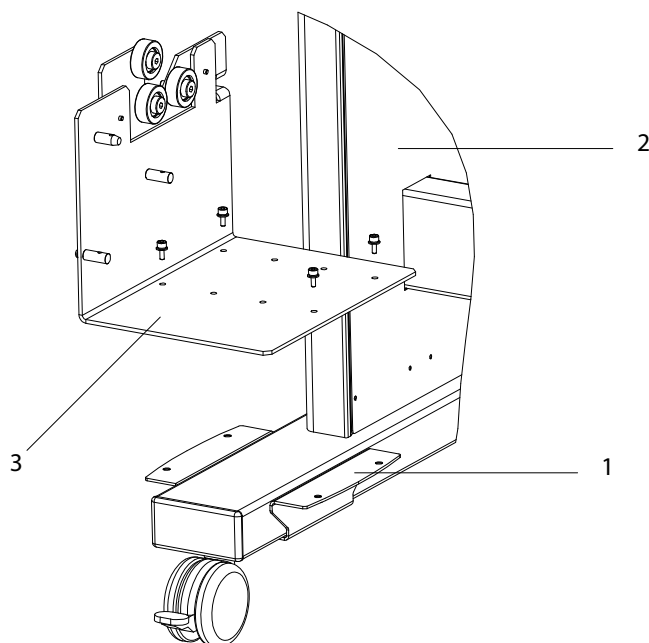


The left bracket consists out of two parts.

Step 1 : Attach the closing bracket (1) to the stand (2).

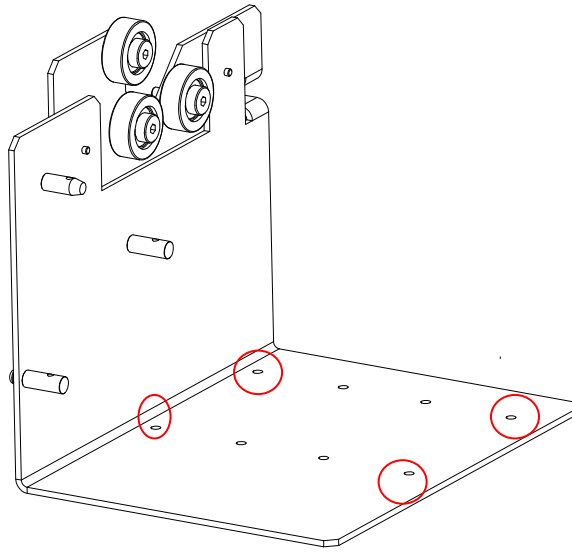
Step 2 : When fixing the support bracket (3) to the closing bracket, make sure the support bracket is positioned against the feet of the stand.

Step 3 : Fix the support bracket with 4 screws M4x10 to the closing bracket.

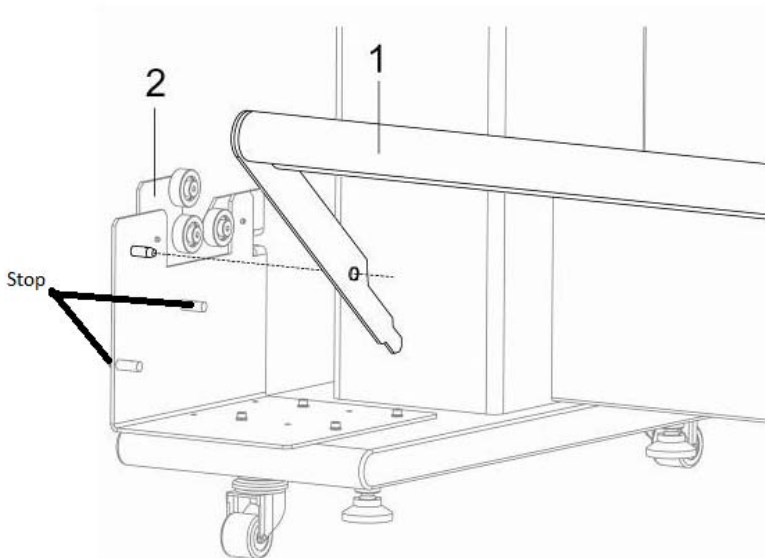


⚠ Notes ⚠

Note that there are 8 holes in the left bracket. Be sure to position the bracket correctly.

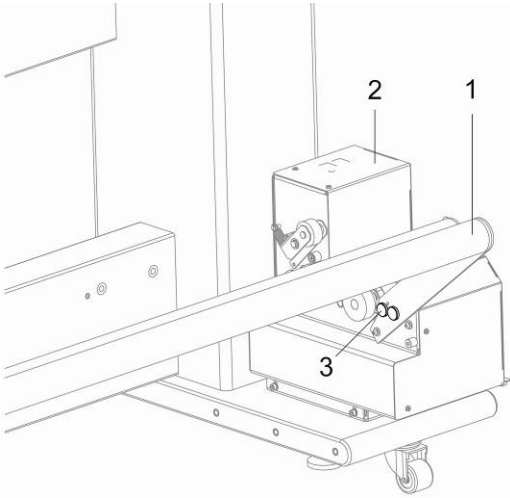


Step 4 : Insert the tensioning bar (1) in the positioning pen in the left bracket (2).

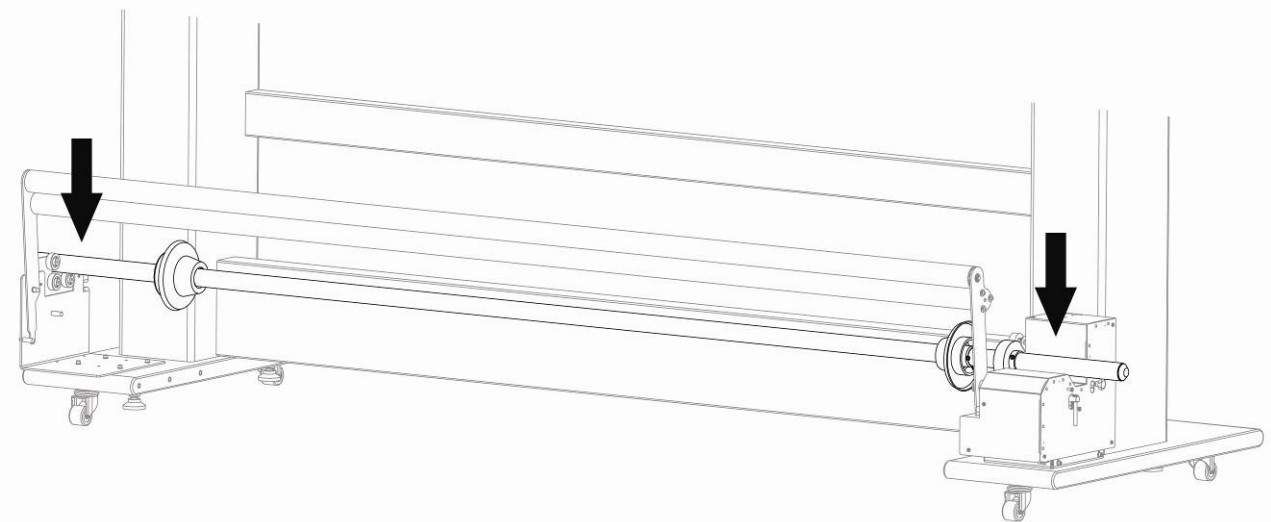
**⚠ Notes ⚠**

- Make sure that the tensioning bar is positioned in between the two stops.

Step 5 : Fix the tensioning bar (1) to the drive mechanism (2) using 2 "M4x10" screws (3).



Step 6 : Install the scroller bar between the left bracket and driving mechanism.



Step 7 : The installation is completed.

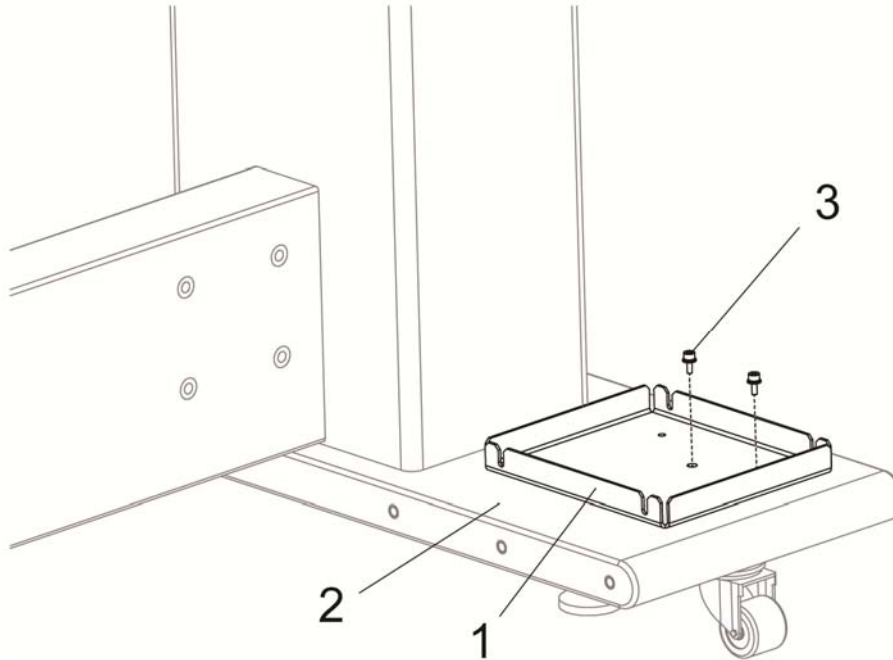
Step 8 : Refer to the next chapter to calibrate the tensioning bar and scroller assembly.

This has to be done to guarantee a smooth and perfect winding flow.

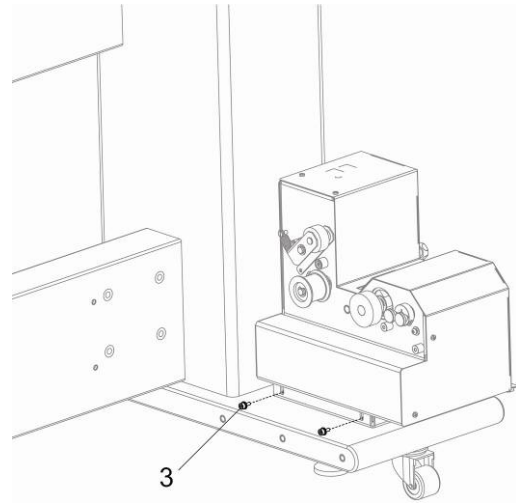
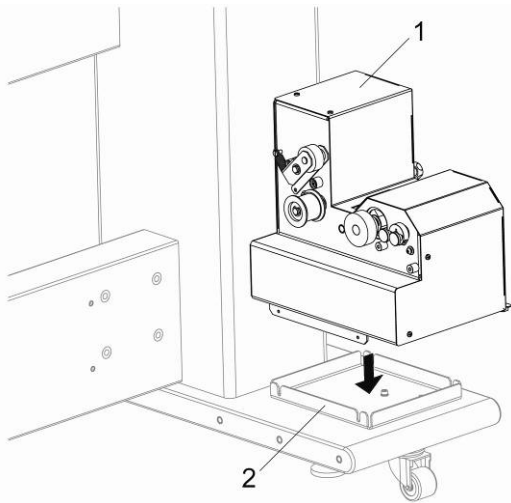
3.1.2 On a VJ-1604 / VJ-1614, Spitfire and Rockhopper 3

Step 1 : Loosen the four screws fixing the right bracket with the driving mechanism.

Step 2 : Mount the right bracket (1) to the right leg (2) of the stand using 2 “M5 screws (3).



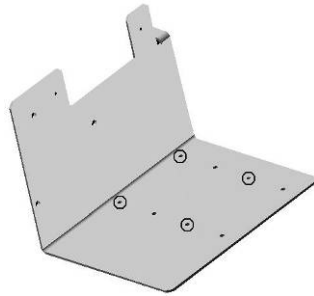
Step 3 : Install the driving mechanism (1) in the right bracket (2) and tighten the four screws (3).



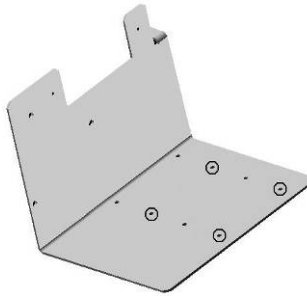
Step 4 : Mount the left bracket (1) to the left leg (2) of the stand using 4 "M4x10" screws (3).

⚠ Notes ⚠

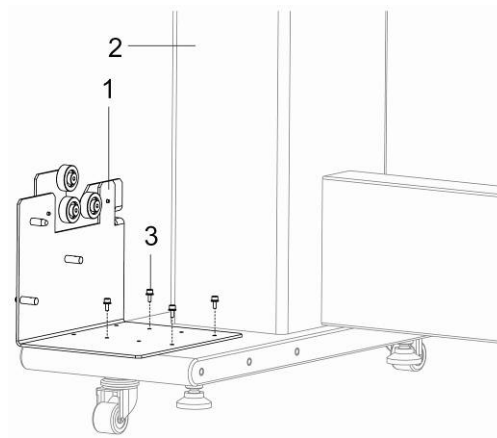
Note that there are 8 holes in the left bracket. Be sure to position the bracket correctly.



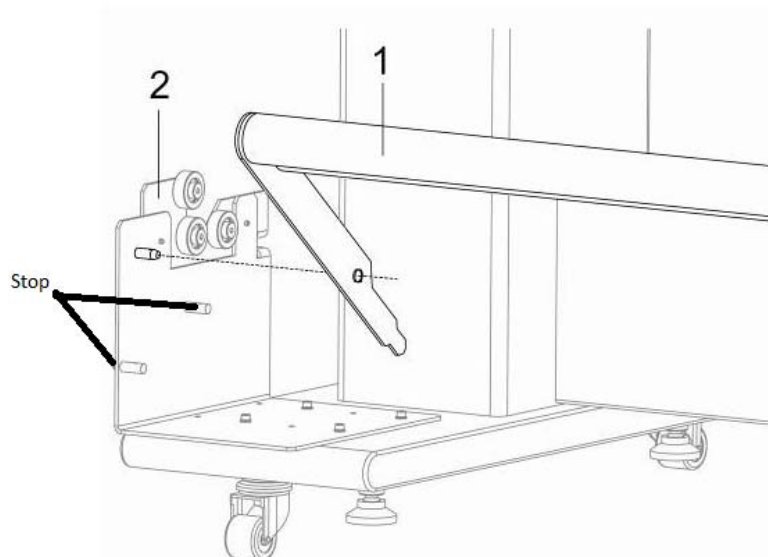
For ValueJet 16XX series



For Rockhopper 3 and Spitfire



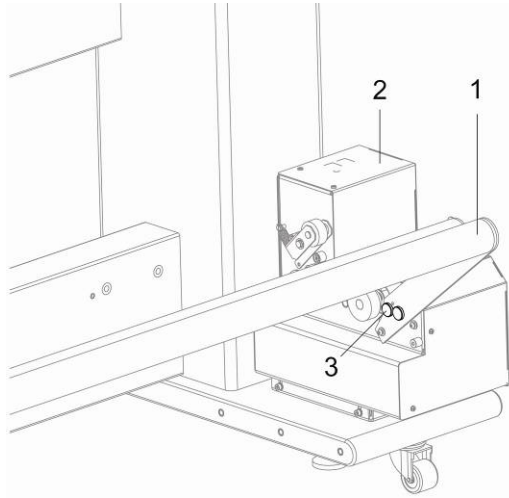
Step 5 : Insert the tensioning bar (1) in the positioning pen in the left bracket (2).



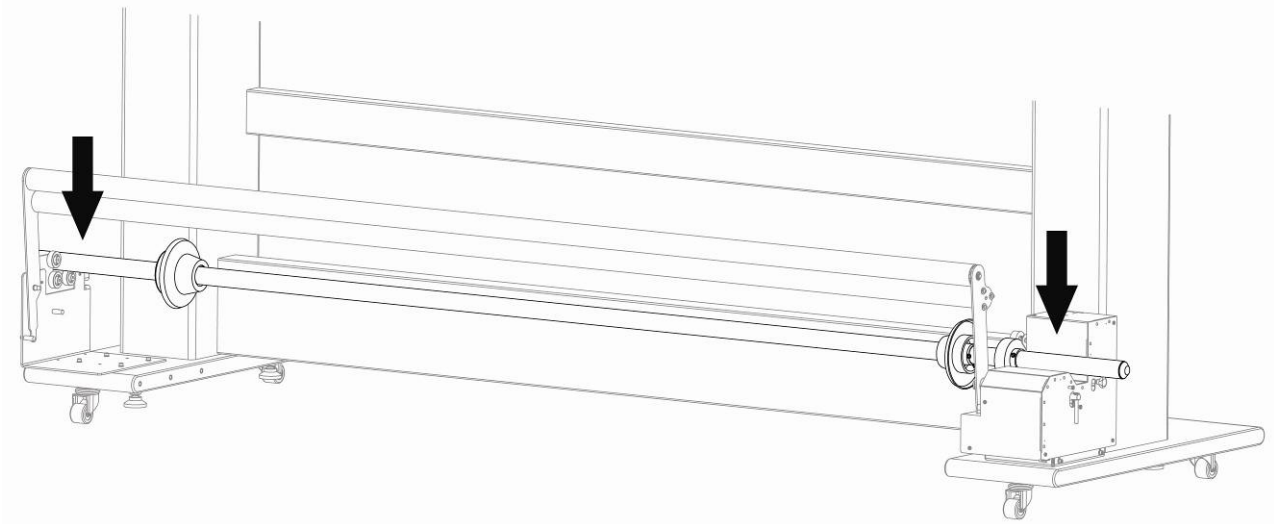
⚠ Notes ⚠

- Make sure that the tensioning bar is positioned in between the two stops.

Step 6 : Fix the tensioning bar (1) to the drive mechanism (2) using 2 “M4x10” screws (3).



Step 7 : Install the scroller bar between the left bracket and driving mechanism.



Step 8 : The installation is completed.

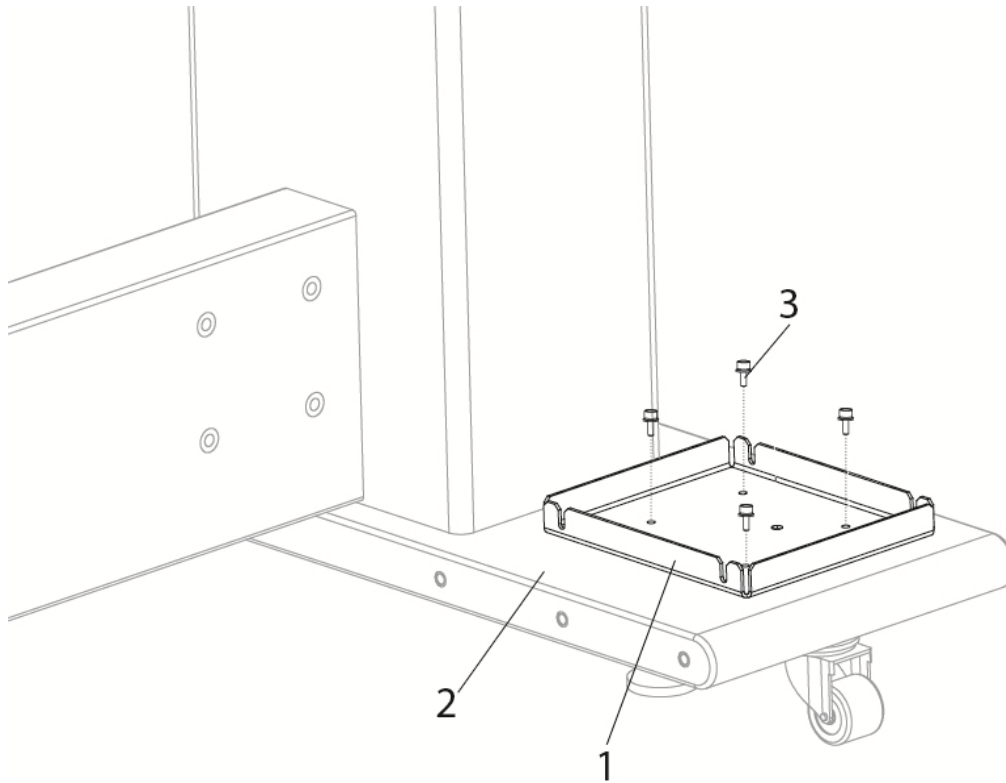
Step 9 : Refer to the next chapter to calibrate the tensioning bar and scroller assembly.

This **has** to be done to guarantee a smooth and perfect winding flow.

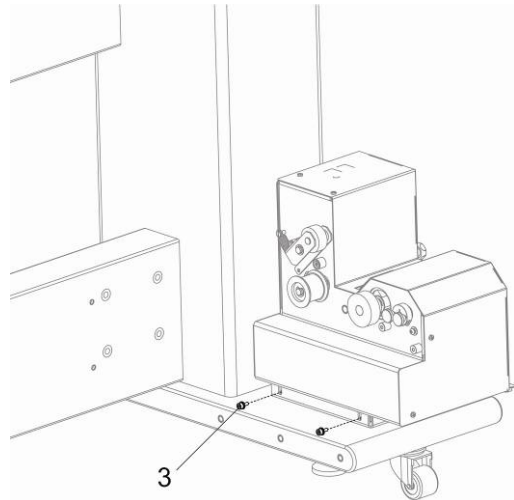
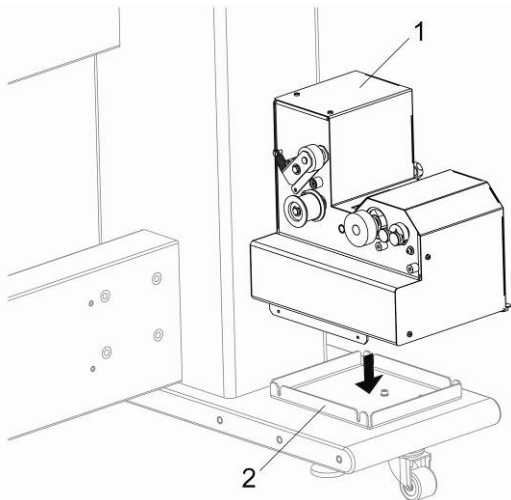
3.1.3 On a VJ-1624 / VJ1628TD

Step 9 : Loosen the four screws fixing the right bracket with the driving mechanism.

Step 10 : Mount the right bracket (1) to the right leg (2) of the stand using 4 "M4 screws (3).



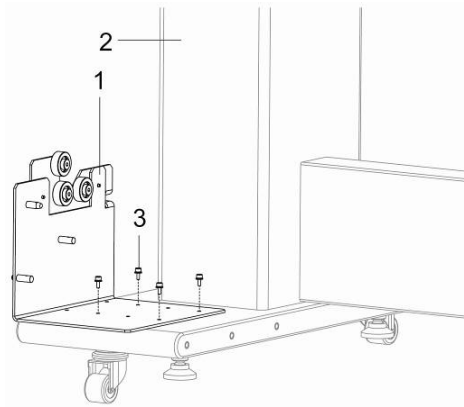
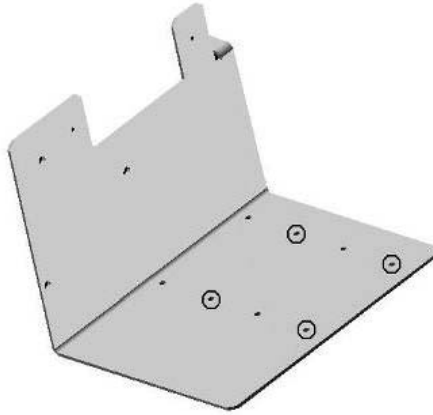
Step 11 : Install the driving mechanism (1) in the right bracket (2) and tighten the four screws (3).



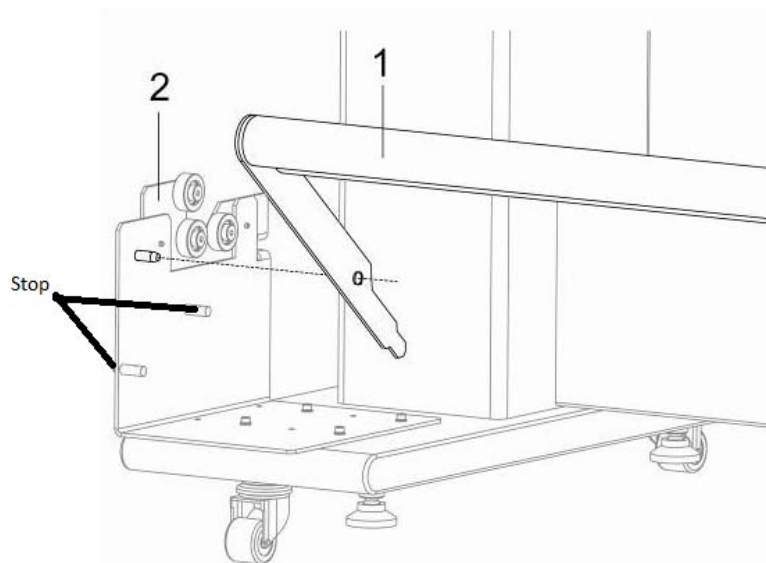
Step 12 : Mount the left bracket (1) to the left leg (2) of the stand using 4 “M4x10” screws (3).

⚠ Notes ⚠

Note that there are 8 holes in the left bracket. Be sure to position the bracket correctly.



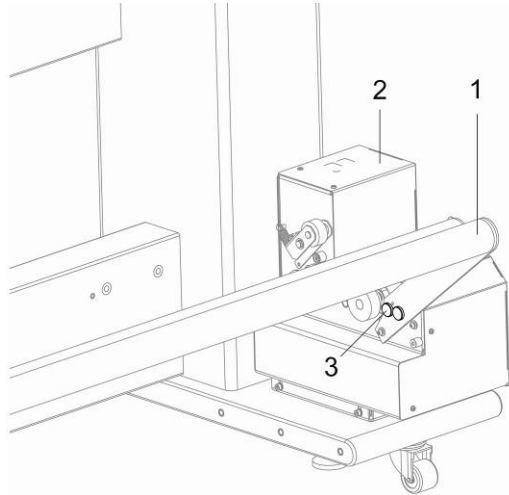
Step 13 : Insert the tensioning bar (1) in the positioning pen in the left bracket (2).



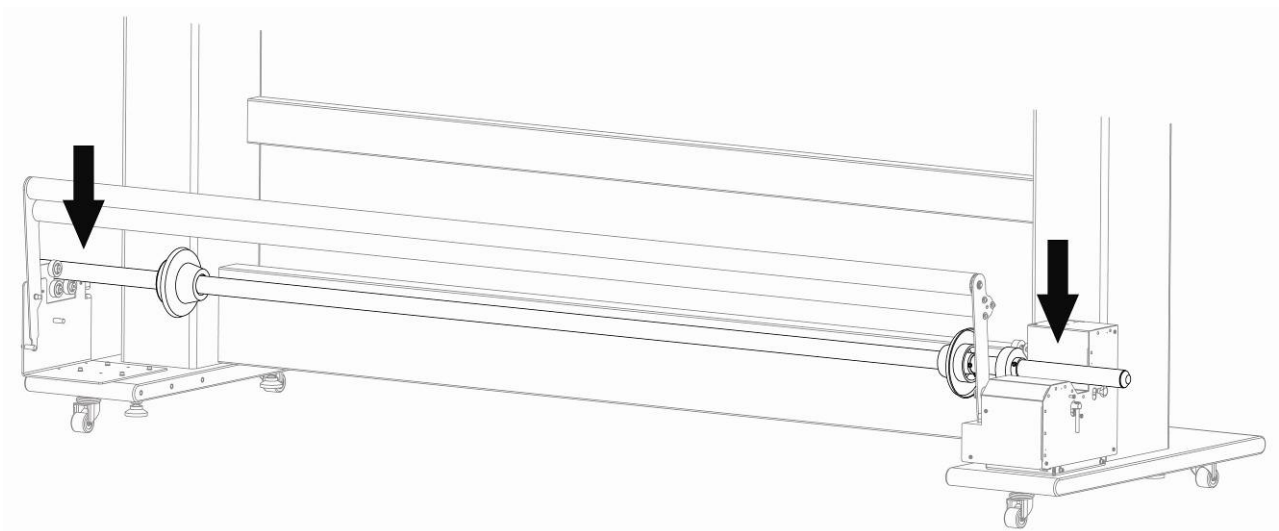
⚠ Notes ⚠

Make sure that the tensioning bar is positioned in between the two stops.

Step 14 : Fix the tensioning bar (1) to the drive mechanism (2) using 2 "M4x10" screws (3).



Step 15 : Install the scroller bar between the left bracket and driving mechanism.



Step 16 : The installation is completed.

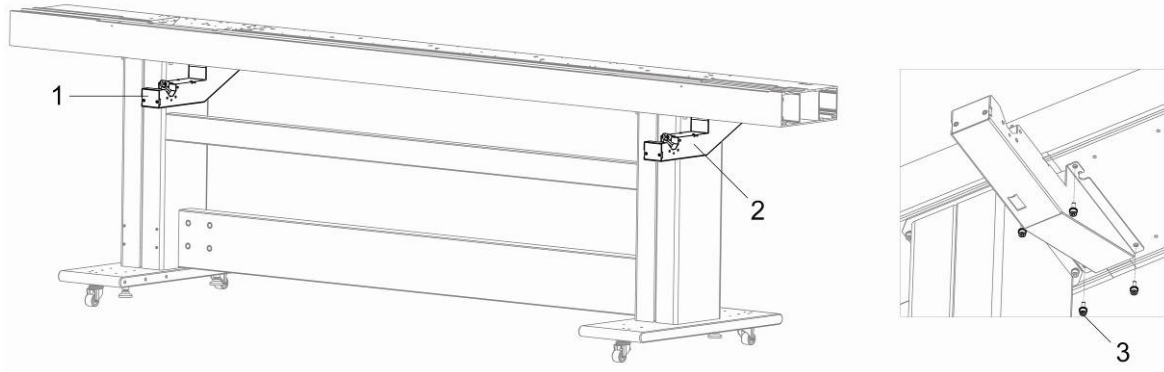
Step 17 : Refer to the next chapter to calibrate the tensioning bar and scroller assembly.

This **has** to be done to guarantee a smooth and perfect winding flow.

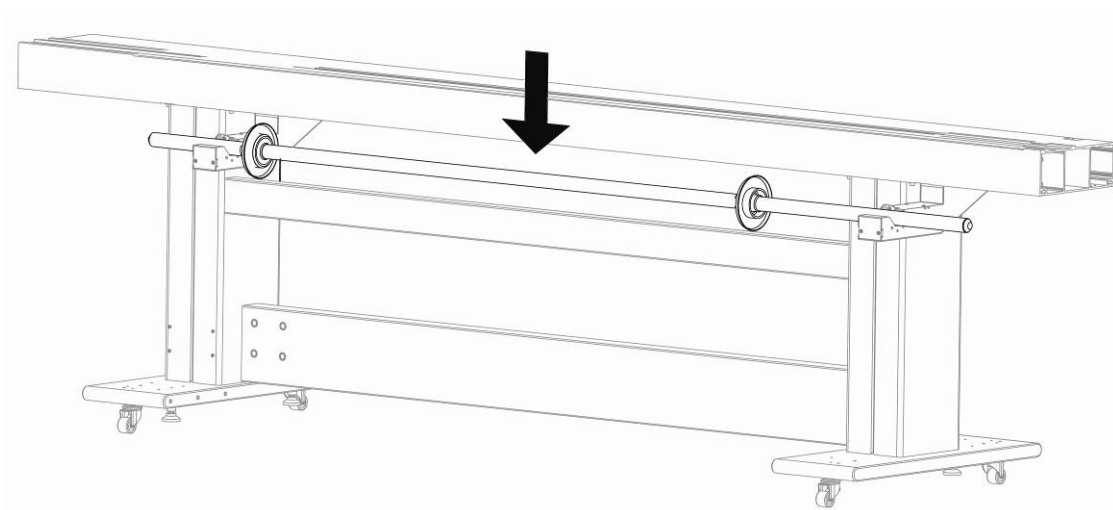
3.2 INSTALLING THE REAR SCROLLER SYSTEM

(ONLY FOR A SPITFIRE 65" OR ROCKHOPPER 3 65")

Step 1 : Install the left and right bracket arm at the bottom and rear side of the printer using for each 4 bolts M6x16, 4 washers and 4 spring washers.



Step 2 : Install the scroller bar at the back.



This page is intentionally left blank.

4 CALIBRATION PROCEDURE

As well as the swingbar as the scroller assembly should be adjusted after installation.

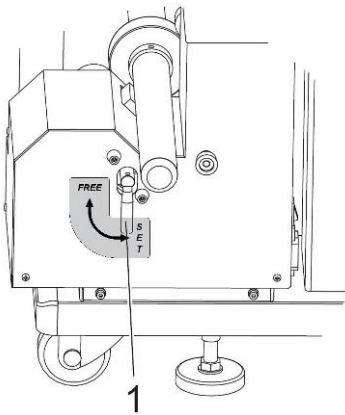
4.1 TENSIONING BAR

Tools needed

- Synthetic paper strip
- Adjustment plate
- 6 spacers of 0,5 mm
- Hexagon key
- Tape (not included in winder kit)
- Pencil (not included in winder kit)

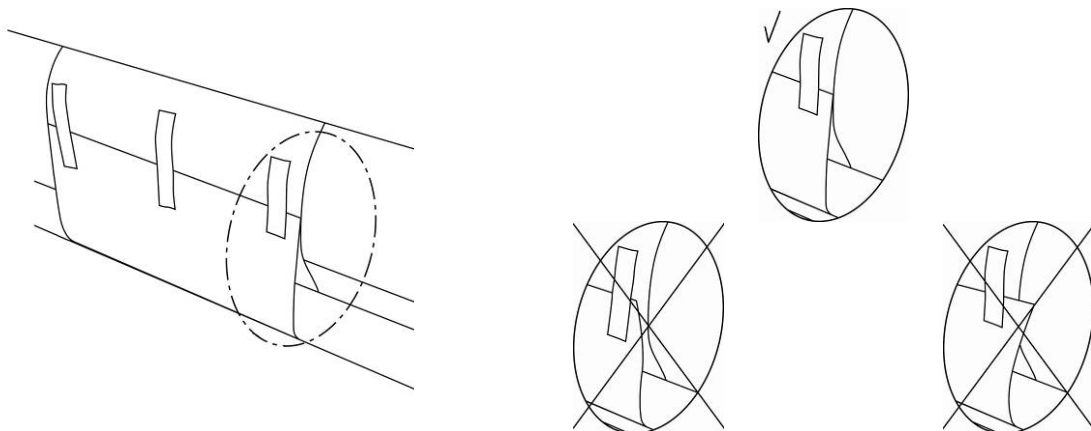
4.1.1 Calibration

Step 1 : Lock the driving mechanism.



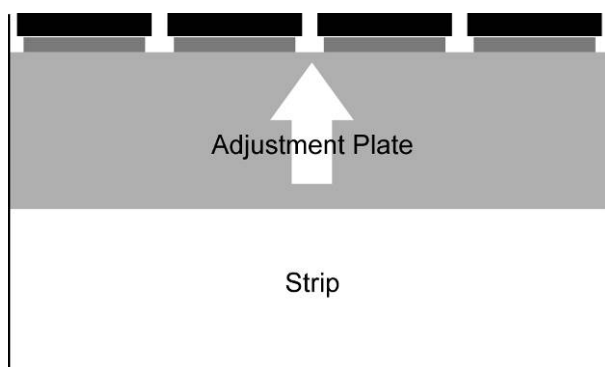
Step 2 : Raise the pressure rollers of the printer.

Step 3 : Create a **straight** loop with the synthetic paper strip around the tensioning bar in the front.

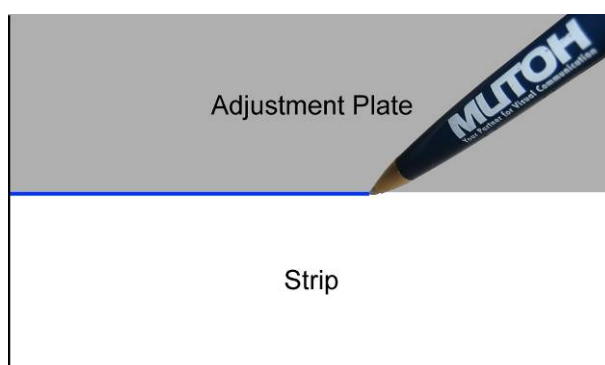


Step 4 : Guide the other end of the strip under the pressure rollers to the back of the machine and move the strip to the left side of the machine. Create a little tension on the strip to be sure it is straight. Leave the tension bar in its lowest position.

Step 5 : Place the adjustment plate at the front of the printer against the pressure rollers.

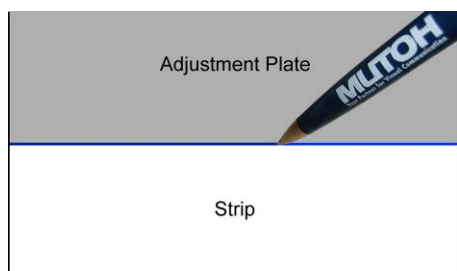


Step 6 : Draw a line on the strip.



Step 7 : Move the strip to the right side.

Step 8 : Draw a line for the second time. The following two situations can be obtained.



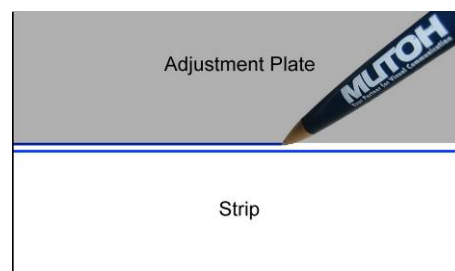
The lines overlap each other

► well adjusted



The lines do NOT overlap each other

► perform the adjustment procedure as described in the next chapter



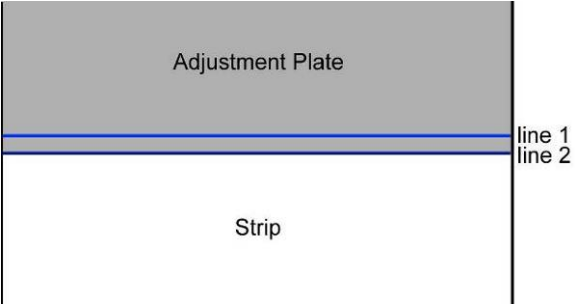
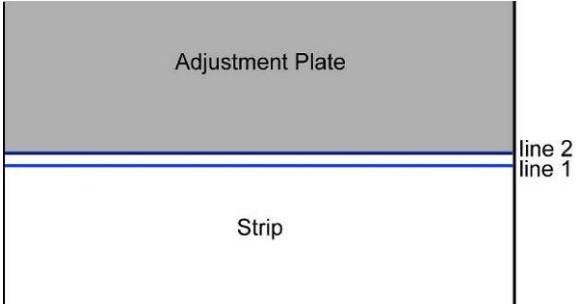
4.1.2 Adjustment

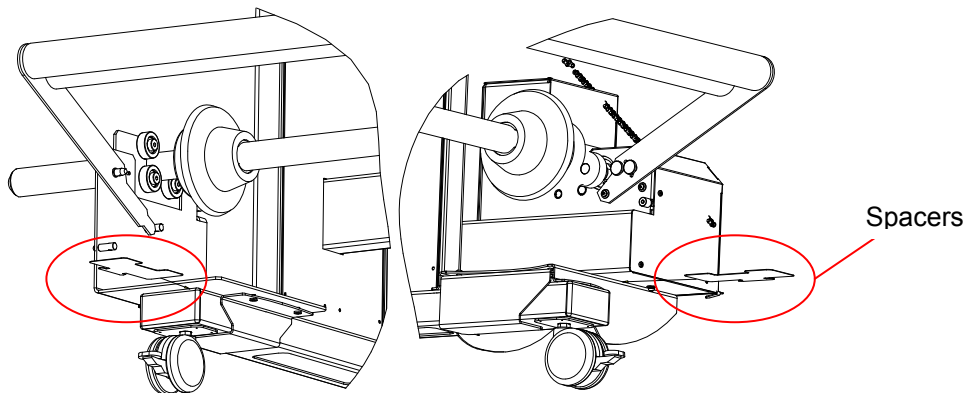
Depending on the result of the calibration (as described in the previous chapter), the tensioning bar should be adjusted until it is positioned horizontally to obtain an equal tension left and right.

Follow the procedure below to adjust the tensioning bar.

Step 1 : Use as many spacers as necessary to cover the space between the two lines drawn on the synthetic paper strip in the calibration procedure.

Step 2 : Evaluate which side of the swingbar is higher and which side should be spaced up.

Situation 1	Situation 2
 Line 1 = left side calibration line Line 2 = right side calibration line	 Line 1 = left side calibration line Line 2 = right side calibration line
In this situation, the right side of the tensioning bar is higher than the left side.	In this situation, the left side of the tensioning bar is higher than the right side.
The left side of the T winder 30 should be spaced up.	The right side of the T winder 30 should be spaced up.
Step 3 : Install all the spacers under the left or right bracket of the T Winder 30 depending on the deviation in double (*) - Loosen the left or right bracket. - Install one or more spacers under the bracket. - Tighten the right or left bracket again.	



Step 4 : Verify the adjustment by following the calibration procedure once again.

* It is recommended to use each time 2 spacers next to each other because of the large bearing surface. Please refer to picture below.

4.2 SCROLLER BAR

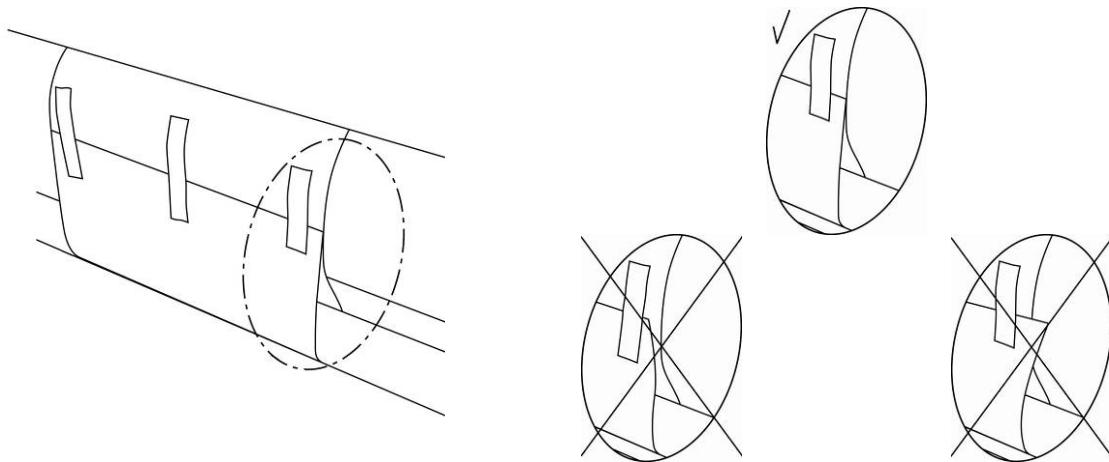
Tools needed

- Synthetic paper strip
- Adjustment plate
- Hexagon key 3 mm
- Tape (not included in winder kit)
- Pencil (not included in winder kit)

4.2.1 Calibration

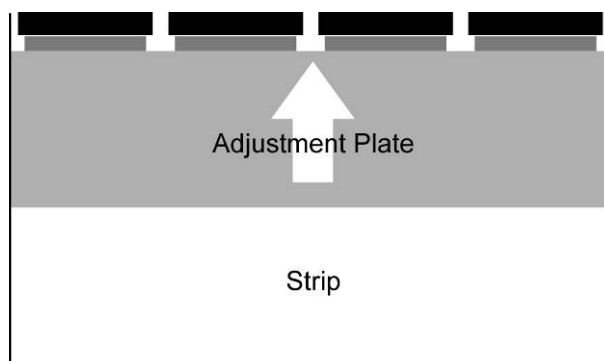
Step 1 : Raise the pressure rollers of the printer.

Step 2 : Create a **straight** loop with the synthetic paper strip around the scroller bar in the front.

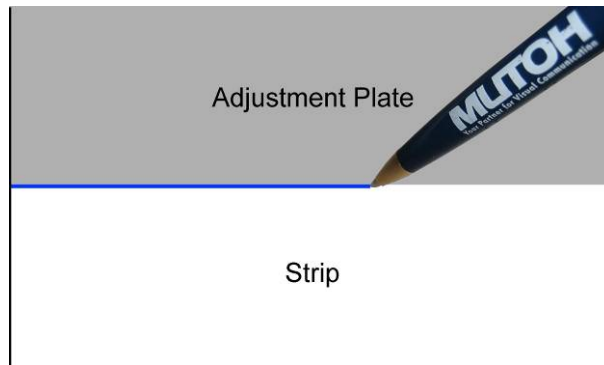


Step 3 : Guide the other end of the strip under the pressure rollers to the back of the machine and move the strip to the left side of the machine. Create a little tension on the strip to be sure it is straight.

Step 4 : Place the adjustment plate at the front of the printer against the pressure rollers.

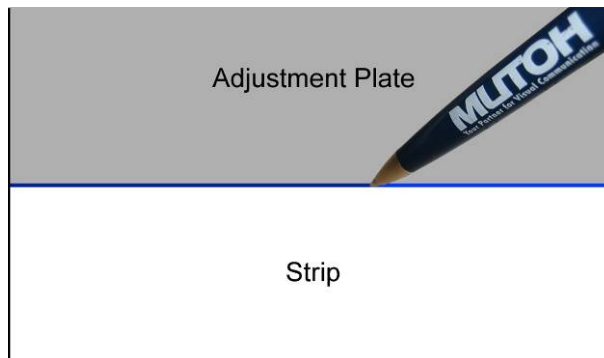


Step 5 : Draw a line on the strip.



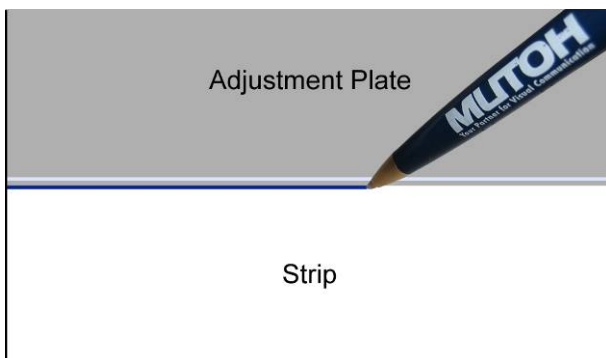
Step 6 : Move the strip to the right side.

Step 7 : Draw a line for the second time. The following two situations can be obtained.

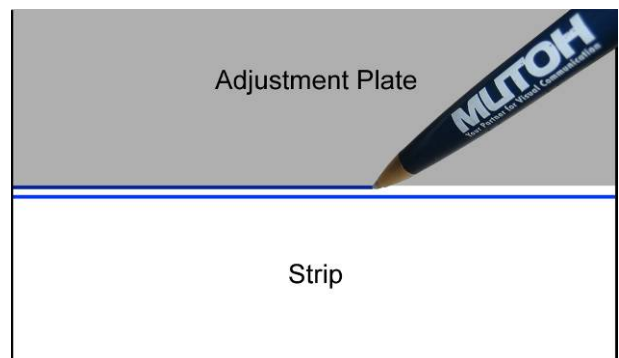


The lines overlap each other
► well adjusted

X



X



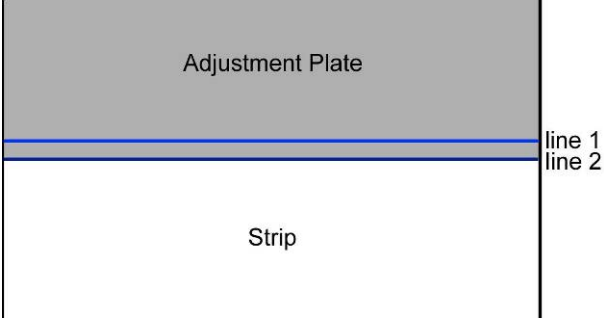
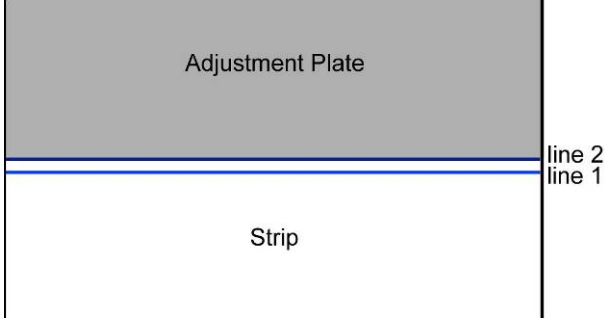
The lines do NOT overlap each other
► perform the adjustment procedure as described in the next chapter

4.2.2 Adjustment

Depending on the result of the calibration (as described in the previous chapter), the scroller bar should be adjusted until it is positioned horizontally to obtain a straight winding flow.

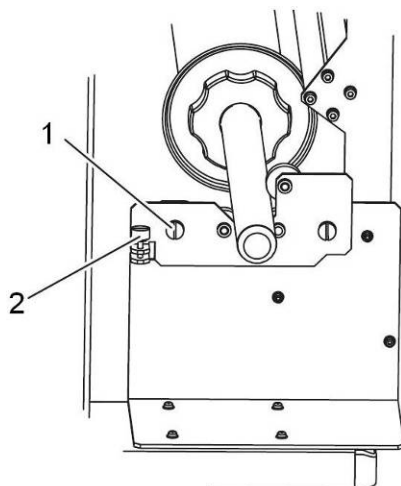
Follow the procedure below to adjust the scroller bar.

Step 1 : Evaluate on basis of the drawn lines how the bar is positioned compared to the print platform.

Situation 1	Situation 2
 Line 1 = left side calibration line Line 2 = right side calibration line In this situation, the right side of the scroller bar is higher than the left side. Higher the left side of the scroller bar with the adjustment screw.	 Line 1 = left side calibration line Line 2 = right side calibration line In this situation, the left side of the scroller bar is higher than the right side. Lower the left side of the scroller bar with the adjustment screw.

Step 2 : Lower or higher the left side of the scroller bar as follows:

- a. Loosen the fixation screw (1).
- b. Higher or lower the scroller bar with the adjustment screw (2).



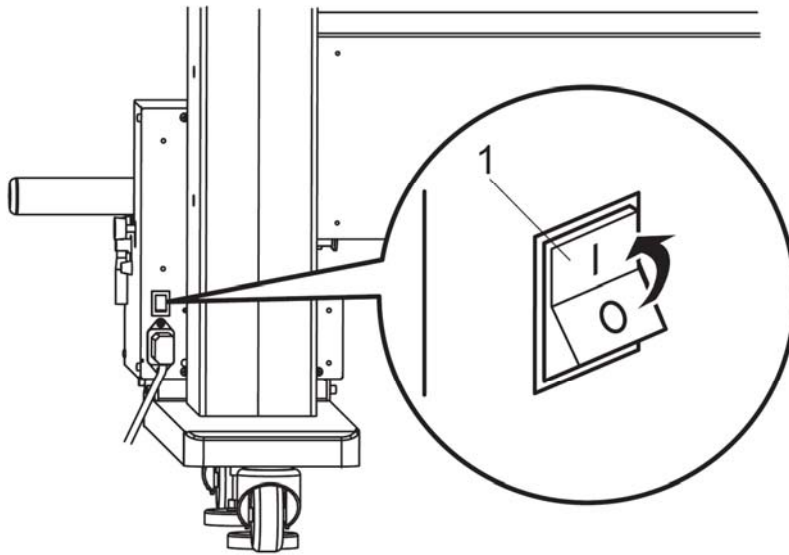
- c. Tighten the fixation screw again.

Step 3 : Verify the adjustment by following the calibration procedure once again.

5 OPERATING THE SYSTEM

5.1 SWITCHING THE POWER ON/OFF

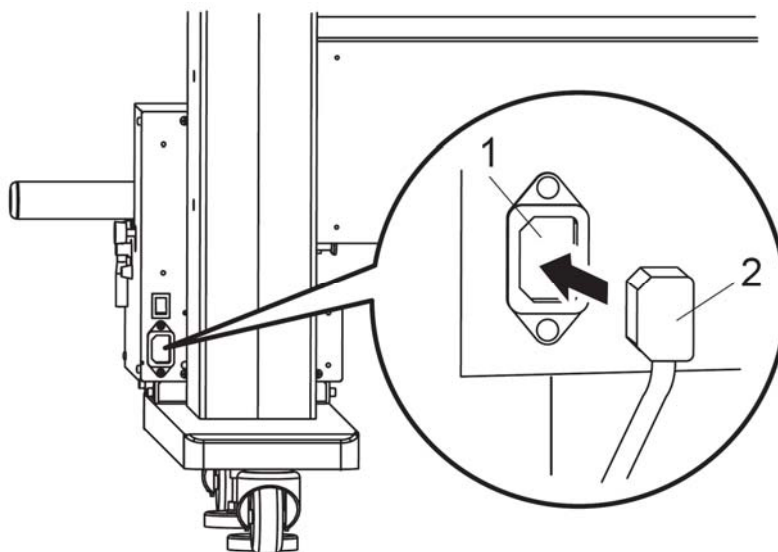
Step 1 : Push the button at the back of the driving mechanism (position "I") to power ON.



5.2 CONNECTING THE POWER CABLE

Step 1 : Be sure that the power is switched OFF.

Step 2 : Connect the power cable to the AC inlet at the back of the driving mechanism.

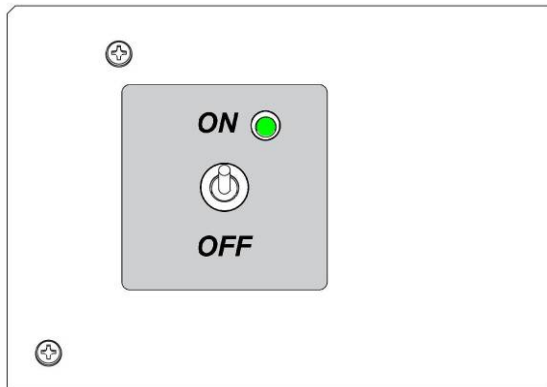


Step 3 : Insert the other side of the power cable in the power socket.

5.3 ACTIVATE THE WINDING SYSTEM

Step 1 : Power ON the driving mechanism at the back.

Step 2 : Enable the winding system with the switch on top of the driving mechanism.



Status LED

ON	The winding system is switched ON
BLINKING	The winding system is operating
OFF	The winding system is switched OFF

5.4 LOCKING THE SYSTEM

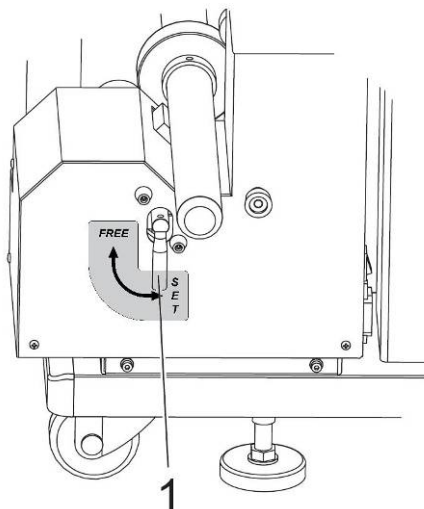
There are two different positions for the scroller bar. In one position it is "set" and in the other position it is "free". Use the handle to switch between the two positions. The purpose for this choice is as follows

SET

- automatic mode
- the scroller bar will be driven by the motorized mechanism when necessary
- not possible to turn the scroller bar by hand

FREE

- manual mode
- the scroller bar will have no contact with the motorized mechanism
- possible to turn the scroller bar by hand



5.5 LOADING ROLL MEDIA

Step 1 : Power ON the printer.

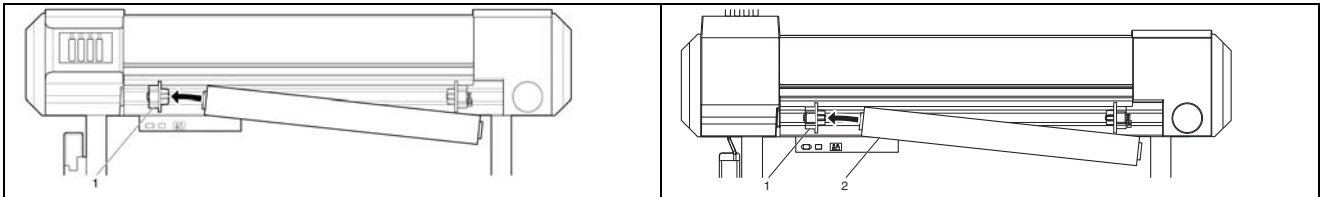
Step 2 : Power ON the winding system (at the back).

Step 3 : Be sure that the winding switch is set "OFF".

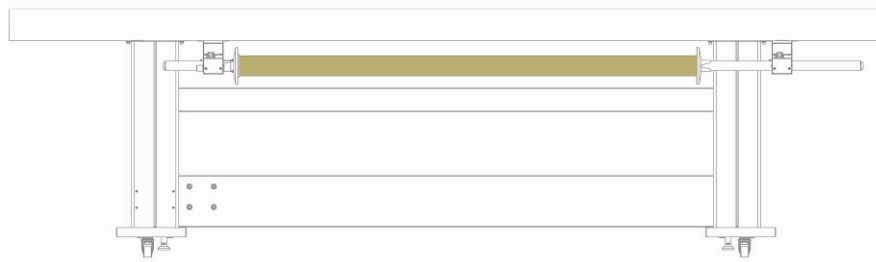
Step 4 : Raise the pressure rollers of the printer.

Step 5 : Load a roll of media at the back of the printer.

(1) For ValueJet 1604, ValueJet 1604 W, ValueJet 1608 H and ValueJet 1614 ► between the scroller supports



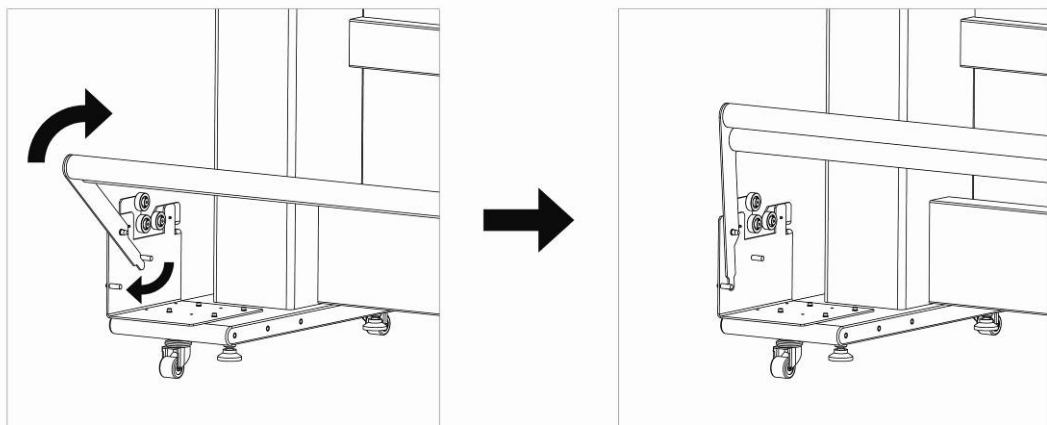
(2) For Spitfire and Rockhopper 3 ► on the scroller bar



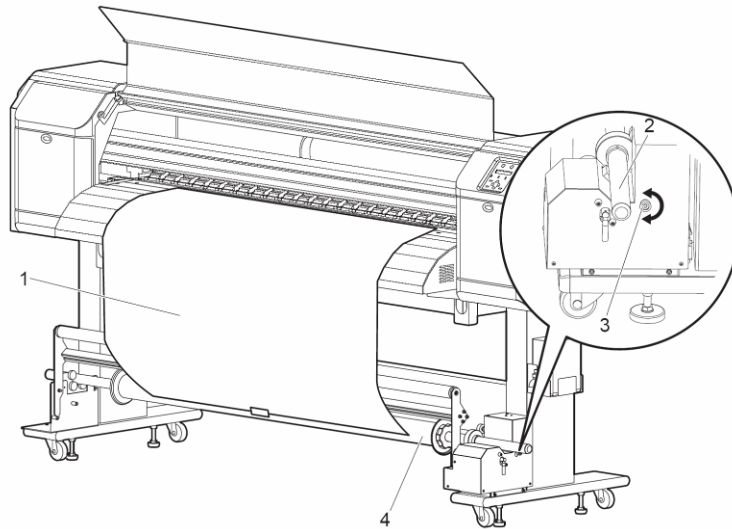
Step 6 : Unwind some media and guide it under the pressure rollers to the front of the printer.

Step 7 : Load an empty core at the front of the printer at the same height of the media. Be sure that the core is at least as wide as the media.

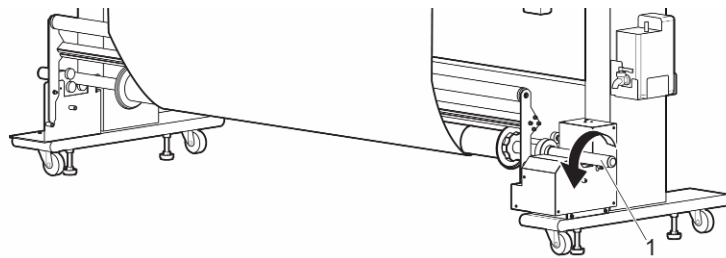
Step 8 : Be sure that the swingbar is in vertical position.



- Step 9 :** Guide the media (1) to the empty core and tighten the media with some tape.
Fine-tune the horizontal position of the scroller (4) with the adjustment screw (3) at the side.

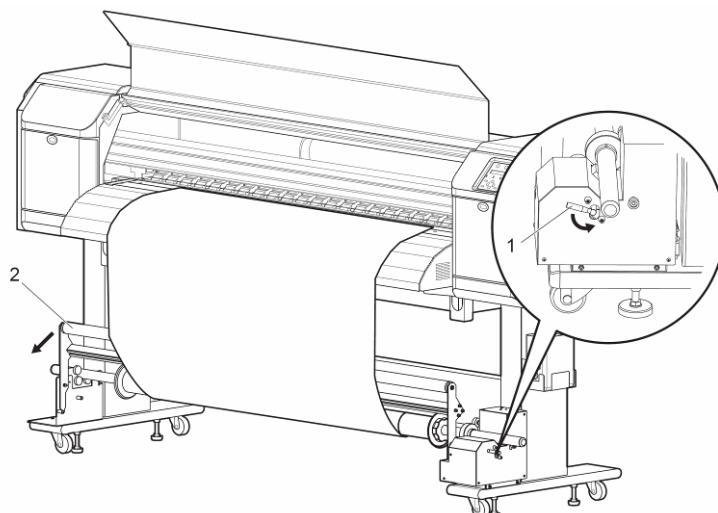


- Step 10 :** Set the winding system to "FREE" and manually turn the scroller to roll up some media.



- Step 11 :** Pull down the tensioning bar (2) and set the winding system back to "SET" (1).

The system will automatically go to its idle position.



- Step 12 :** Lower the pressure rollers of the printer

- Step 13 :** Enable the winding system. The swingbar will move to its initial position.

- Step 14 :** Initialize the media as described in the User's Guide of the printer

